

III. CLAIM AMENDMENTS

1.(Original) A method for the generation of a pseudo-random permutation of an N-digit word in which:

a generalized Feistel scheme is implemented, wherein:
the round functions of the generalized Feistel scheme implemented are functions (Fi) such that:

the input words of the round functions are produced by the conversion of digit words into binary words,

then a one-way function is applied to these binary words,

finally, the output in digits is a function of these binary words.

a digit word to be enciphered is read in a memory,

the generalized Feistel scheme used comprises at least
T = 5 rounds.

2.(Original) A method according to claim 1, wherein the one-way function on the binary words uses a standard pseudo-random cryptography function on binary words.

3.(Currently Amended) A method according to ~~one of the claims 1 or 2~~ claim 1 wherein the standard pseudo-random function on the binary words uses the SHA-1 function.

4.(Currently Amended) A method according to ~~one of the claims 1 to 3~~ claim 1 wherein the number of rounds T of the Feistel scheme is smaller than or equal to 30.

5.(Currently Amended) A method according to ~~one of the claims 1 to 4~~ claim 1, wherein the number of rounds T of the Feistel scheme is equal to 6.

6. (Currently Amended) A method according to ~~one of the claims 1 to 5~~ claim 1 wherein, during odd-valued rounds of the Feistel scheme, the round function works on a word with a length B, and during even-valued rounds of the Feistel scheme it works on words with a length of A digits, where $A + B = N$.

7. (Original) A method according to claim 6, wherein A is equal to the integer part of $N / 2$ and B is equal to $N - A$.

8. (Currently Amended) A method according to ~~one of the claims 1 to 7~~ claim 1, wherein N is an integer contained in the interval $[7, 30]$.

9. (Currently Amended) A method according to ~~one of the claims 1 to 8~~ claim 1, wherein N is an integer contained in the interval $[10, 30]$.

10. (Currently Amended) A method according to ~~one of the claims 1 to 8~~ claim 1, wherein N is an integer contained in the interval $[13, 30]$.